

REMARKS

Reconsideration of the above-identified Application is respectfully requested. Claims 1-6 and 8-28 are in the case. Claim 7 has been canceled. Claims 1 and 16 have been amended.

Regarding the rejection of Claim 16 under 35 U.S.C. § 112, 2nd paragraph, the required clarification has been made by amendment herein. It is respectfully submitted that the rejection has been overcome. Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claims 1, 7, 11, 12, 16 and 18-21 under 35 U.S.C. § 102(e) as allegedly being anticipated by Aikawa et al., independent Claims 1 and 16 have been amended to overcome the rejection with respect to Claims 1, 11, 12, 16 and 18-21, with Claim 7 having been canceled thereby rendering this rejection moot with respect thereto.

With respect to independent Claim 1, this claim now recites “responding to the request signal with a negative acknowledgement (NAK) to intentionally postpone a response to the request signal; downloading data from the data source for a predetermined time period based on the request signal, *while continuing to respond to further request signals with NAKs, if further requests are received before the data are finished downloading; and after the data are finished downloading, responding to a further request signal with a response other than a NAK.*” (Emphasis added.) This serves the purpose of downloading data, for example firmware, in a period that may exceed a time allotted for such download after a request signal is received.

The patent to Aikawa et al. apparently relates to a method for optimizing polling systems in order to reduce bus congestion caused by the repeated sending of NAK signals. In the method of Aikawa et al., a polling interval is set based either on the number of times a NAK signal is received by a USB host system, or on a statistical parameter based on the number of times a NAK signal is received before a successful data transfer. They do not teach, nor do they

suggest responding to a request signal with a NAK to intentionally postpone a response to the request signal, much less downloading data from a data source for a predetermined time period based on the request signal, while continuing to respond to further request signals with NAKs, for the simple reason that this would not serve their purpose.

The other art of record is even less relevant.

For all of the above reasons it is respectfully submitted that Claim 1 is allowable over Aikawa et al. and, indeed, all of the art of record, whether considered individually or in any combination. Claims 11 and 12 depend from Claim 1 and so they are allowable as well for the same reasons, as well as for the additional limitations found therein.

With respect to independent Claim 16, this claim now recites a method for a UDB device to download firmware while connected to a USB host, including, *inter alia*, the steps of “waiting for a request signal from the USB host; responding to the request signal with a negative acknowledgement (NAK) to intentionally postpone a response to the request signal; downloading data blocks associated with firmware from a data source based on a predetermined time period associated with the request signal type; and repeating the waiting for a request signal, the sending of NAKs and the downloading of data blocks from the data source, until the downloading of the firmware is complete.” Therefore, it is respectfully submitted that for the same reasons as those set forth above with respect to Claim 1, Claim 16 is allowable. Claims 18-21 all depend, either directly or indirectly, from Claim 16 and so are allowable as well for the same reasons, as well as for the additional limitations found therein.

Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claims 2-5, 22, 24, 26 and 27 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aikawa et al. in view of Kitagawa et al., independent Claim 1 has been amended as discussed above to overcome the rejection of Claims 2-5, which depend, directly or indirectly, from Claim 1,

with respect to Aikawa et al., for the reasons discussed above, while the rejection is respectfully traversed with respect to Claims 22, 24, 26 and 27.

With respect to Claims 2-5, the patent to Kitagawa et al. fails to cure the deficiencies of the patent to Aikawa et al., having been cited merely a data source comprising non-volatile, EEPROM memory, and for initializing variables and determining whether firmware is valid. It is therefore respectfully submitted that for all of the above reasons Claims 2-5 are allowable over Aikawa et al., Kitagawa et al., and, indeed, all of the art of record, whether considered individually or in any combination.

With respect to Claims 22, 24, 26 and 27, independent Claim 22 sets forth a USB compatible device, and recites, *inter alia*, “an instruction memory storing instructions for execution by the MCU upon reset, the execution of the instructions controlling the device to respond with a negative acknowledgement (NAK) in response to a request signal from a host controller, *to download the firmware for use by the MCU for a period of time after responding with the NAK, and to continue to respond with NAKs and to download the firmware until downloading of the firmware to the MCU has completed*” (emphasis added).

Therefore, it is respectfully submitted that for similar reasons to those set forth above with respect to Claim 1, Claim 22 is allowable. Claims 24, 26 and 27 all depend, either directly or indirectly, from Claim 22 and so are allowable as well for the same reasons, as well as for the additional limitations found therein.

Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claims 6, 8-10, 13-15 and 17 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aikawa et al. in view of Falik et al., independent Claim 1 has been amended as discussed above to overcome the rejection of Claims 6, 8-10 and 13-15 which depend, directly or indirectly, from Claim 1, with respect to Aikawa et al., for the reasons discussed above, while independent Claim 16 has been amended as discussed above to overcome the rejection of Claim 17, which depends from Claim 16, with respect to Aikawa et

al., for the reasons discussed above. The patent to Falik et al. fails to cure the deficiencies of Aikawa et al. with respect to Claims 1 and 16, having been cited merely for a controller generating a pointer and a byte counter.

Therefore, it is respectfully submitted that for all of the above reasons Claims 1 and 16 are allowable. Claims 6, 8-10, 13-15 and 17 all depend, either directly or indirectly, from either Claim 1 or 16 and so are allowable as well for the same reasons, as well as for the additional limitations found therein.

Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of Claims 23, 25 and 28 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aikawa et al. in view of Kitagawa et al. and Falik et al., this rejection is respectfully traversed. The reasons for the allowability of independent Claim 22 over Aikawa et al. and Kitagawa et al. are set forth above. The patent to Falik et al. fails to cure the deficiencies of Aikawa et al. and Kitagawa et al. for reasons similar to those set forth above.

Therefore, it is respectfully submitted that for all of the above reasons Claim 22 is allowable. Claims 23, 25 and 28 all depend, either directly or indirectly, from either Claim 22 and so are allowable as well for the same reasons, as well as for the additional limitations found therein.

Wherefore reconsideration and withdrawal of this rejection are respectfully requested.

It is respectfully submitted that the claims recite the patentably distinguishing features of the invention and that, taken together with the above remarks, the present application is now in proper form for allowance. Reconsideration of the application, as amended, and allowance of the claims are requested at an early date.

While it is believed that the instant amendment places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, the Applicants petition for an Extension of Time under 37 C.F.R. §1.136. Please charge any fees in connection with the filing of this paper, including extension of time fees to the Deposit Account No. 20-0668 of Texas Instruments Incorporated.

Respectfully submitted,

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